



FORM PTO-1449

INFORMATION DISCLOSURE STATEMENTATTY. DOCKET NO.
1797.0160001/RWE/CJWAPPLICATION NO.
09/856,561APPLICANT
Li et al.102(e) DATE
December 5, 2001GROUP
1638

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
MAI	AA1	5,320,663	06/14/1994	Cunningham	75	432	07/02/1992
	AB1	5,364,451	11/15/1994	Raskin et al.	75	710	06/04/1993
	AC1	5,407,817	04/18/1995	Lightsey et al.	435	165	08/12/1994
	AD1	5,571,703	11/05/1996	Chieffalo et al.	435	105	04/14/1995
	AE1	5,711,784	01/27/1998	Chaney et al.	75	712	06/06/1995
	AF1	5,779,164	07/14/1998	Chieffalo et al.	241	17	09/23/1996
	AG1	5,785,735	07/28/1998	Raskin et al.	75	711	06/01/1994
	AH1	5,917,117	06/29/1999	Ensley et al.	75	711	03/21/1996
	AI1	5,927,005	07/27/1999	Gardea-Torresdey et al.	47	58.1	04/09/1997
	AJ1	5,928,406	07/27/1999	Salt et al.	75	712	11/01/1994
	AK1	5,944,872	08/31/1999	Chaney et al.	75	712	06/20/1997

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
MAI	AL1	WO 98/08991	03/05/1998	WIPO			Yes No
	AM1	WO 00/28093	05/18/2000	WIPO			Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	1	Baker, A.J.M. et al., "In Situ Decontamination of Heavy Metal Polluted Soils Using Crops of Metal-Accumulating Plants-A Feasibility Study," in <i>In Situ Bioreclamation</i> , Olfenbuttel, R.F. and Hinchee, R.E., eds., Battelle Press, Columbus, OH, pp. 600-605 (January 1991).
	AS	1	Baker, A.J.M. et al., "The possibility of in situ heavy metal decontamination of polluted soils using crops of metal-accumulating plants," <i>Resources, Conservation, and Recycling</i> 11:41-49, Elsevier Science B.V. (1994).
	AT	1	Baker, A.J.M. and Brooks, R.R., "Terrestrial Higher Plants which Hyper-accumulate Metallic Elements - A Review of their Distribution, Ecology and Phytochemistry," <i>Biorecovery</i> 1:81-126, A B Academic Publishers (1989).

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	2	Brooks, R.R. et al., "Detection Of Nickeliferous Rocks By Analysis of Herbarium Specimens Of Indicator Plants," <i>J. Geochem. Explor.</i> 7:49-57, Elsevier (1977).
	AS	2	Brooks, R.R. and Radford, C.C., "Nickel accumulation by European species of the genus <i>Alyssum</i> ," <i>Proc. R. Soc. Lond. B</i> 200:217-224, The Royal Society (1978).
	AT	2	Brooks, R.R. et al., "Hyperaccumulation of nickel by <i>Alyssum Linnaeus</i> (Cruciferae)," <i>Proc. R. Soc. Lond. B</i> 203:387-403, The Royal Society (1979).

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	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	<u>3</u>	Brooks, R.R., "Accumulation Of Nickel By Terrestrial Plants," in <i>Nickel In The Environment</i> , Nriagu, J.O., ed., John Wiley & Sons, New York, NY, pp. 407-430 (1980).
	AS	<u>3</u>	Brooks, R.R., et al., "Some observations on the ecology, metal uptake and nickel tolerance of <i>Alyssum serpyllifolium</i> subspecies from the Iberian peninsula," <i>Vegetatio</i> 45:183-188, Dr. W. Junk Publishers (1981).
	AT	<u>3</u>	Brooks, R.R. et al., "The chemical form and physiological function of nickel in some Iberian <i>Alyssum</i> species," <i>Physiol. Plant.</i> 51:167-170, <i>Physiologia Plantarum</i> (1981).

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	AM						Yes No
	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	4	Brown, S.L. et al., "Division S-4-Soil Fertility & Plant Nutrition. Zinc and Cadmium Uptake by Hyperaccumulator <i>Thlaspi caerulescens</i> Grown in Nutrient Solution," <i>Soil Sci. Soc. Am. J.</i> 59:125-133, Soil Science Society (1995).
	AS	4	Chaney, R.L. et al., "Phytoremediation of soil metals," <i>Curr. Opin. Biotech.</i> 8:279-284, Current Biology Ltd. (1997).
	AT	4	Cunningham, S.D. et al., "Phytoremediation of contaminated soils," <i>Trends Biotech.</i> 13:393-397, Elsevier Science Ltd. (1995).

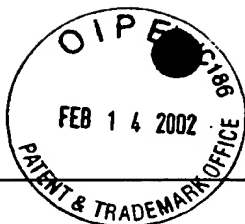
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	AN						Yes No
	AO						Yes No
	AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	<u>5</u>	de Varennes, A. et al., "Effects Of Heavy Metals On The Growth And Mineral Composition Of A Nickel Hyperaccumulator," <i>J. Plant Nutr.</i> 19:669-676, Marcel Dekker, Inc. (1996).
	AS	<u>5</u>	Gambi, O.V. et al., "Investigations on a nickel accumulating plant: « Alyssum bertolonii » Desv. I. Nickel, calcium and magnesium content and distribution during growth," <i>Webbia</i> 32:175-188, Raccolta di Scritti Botanici (1977).
	AT	<u>5</u>	Gambi, O.V. et al., "Some Aspects of the Metabolism of <i>Alyssum bertolonii</i> Desv.," in <i>The Vegetation of Ultramafic (Serpentine) Soils</i> , Proceedings of the First International Conference on Serpentine Ecology, University of California, Davis, June 19-22, pp. 319-329, Intercept Ltd. (1991).

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	AO						Yes No
	AP						Yes No

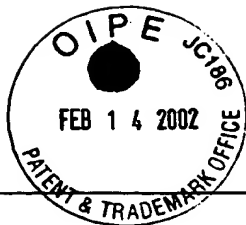
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	<u>6</u>	Homer, F.A. et al., "Characterization Of The Nickel-Rich Extract From The Nickel Hyperaccumulator <i>Dichapetalum Gelonioides</i> ," <i>Phytochemistry</i> 30:2141-2145, Pergamon Press (1991).
	AS	<u>6</u>	Homer, F.A. et al., "Comparative studies of nickel, cobalt, and copper uptake by some nickel hyperaccumulators of the genus <i>Alyssum</i> ," <i>Plant and Soil</i> 138:195-205, Kluwer Academic Publishers (1991).
	AT	<u>6</u>	Ingrouille, M.J. and Smirnoff, N., " <i>Thlaspi Caerulescens</i> J. & C. Presl. (T. Alpestre L.) In Britain," <i>New Phytol.</i> 102:219-233, Academic Press (1986).

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	7	Kumar, P.B.A.N. et al., "Phytoextraction: The Use of Plants to Remove Heavy Metals from Soils," <i>Environ. Sci. Technol.</i> 29:1232-1238, American Chemical Society (1995).
	AS	7	Morrison, R.S. et al., "Nickel Uptake By Alyssum Species," <i>Plant Sci. Lett.</i> 17:451-457, Elsevier/North-Holland Scientific Publishers Ltd. (1980).
	AT	7	Raskin, I. et al., "Bioconcentration of heavy metals by plants," <i>Curr. Opin. Biotech.</i> 5:285-290, Current Biology Ltd. (1994).

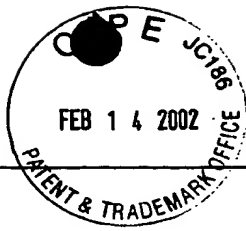
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	AO						Yes No
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MAI	AR	8	Reeves, R.D., "The Hyperaccumulation of Nickel by Serpentine Plants," in <i>The Vegetation of Ultramafic (Serpentine) Soils</i> , Proceedings of the First International Conference on Serpentine Ecology, University of California, Davis, June 19-22, pp. 253-277, Intercept Ltd. (1991).
	AS	8	Reeves, R.D. et al., "Uptake Of Nickel By Species of <i>Alyssum</i> , <i>Bornmuellera</i> , And Other Genera Of Old World Tribus Alysseae," <i>Taxon</i> 32:184-192, International Association for Plant Taxonomy (1983).
	AT	8	Robinson, B.H. et al., "The nickel hyperaccumulator plant <i>Alyssum bertolonii</i> as a potential agent for phytoremediation and phytomining of nickel," <i>J. Geochem. Explor.</i> 59:75-86, Elsevier (1997).

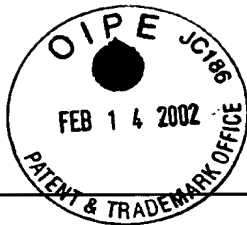
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MAI ↓	AR	<u>9</u>	Robinson, B.H. et al., "Soil Amendments Affecting Nickel and Cobalt Uptake by <i>Berkheya coddii</i> : Potential Use for Phytomining and Phytoremediation," <i>Annals of Botany</i> 84:689-694, Annals of Botany Company (1999).
	AS	<u>9</u>	Romero, F. et al., "Metal Plant And Soil Pollution Indexes," <i>Water, Air, and Soil Pollution</i> 34:347-352, D. Reidel Publishing Company (1987).
	AT	<u>9</u>	Salt, D.E. et al., "Phytoremediation: A Novel Strategy for the Removal of Toxic Metals from the Environment Using Plants," <i>BioTechnology</i> 13:468-474, Nature Publishing Company (1995).

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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

MA	AR	10	Copy of International Search Report for PCT/US99/26443, mailed March 9, 2000.
	AS	10	Copy of International Search Report for PCT/US99/27731, mailed March 7, 2000.
	AT	10	Copy of Co-pending U.S. Patent Application No. 09/437,607, Chaney et al., filed November 10, 1999.

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